

#### **Abstract of the Disclosure**

This invention relates to umbrellas in general. In particular it relates to umbrellas which automatically open and close. This automatic opening and closing of the umbrella in the presented embodiments is accomplished by means of the rotation of a threaded rod driven by an electric motor which is, in turn, driven by battery power.

The improvement disclosed herein relates to a means for increasing the number of times a that an umbrella maybe opened and closed using one charge of a battery and ensuring the reliability of the opening and closing mechanism.